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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,486	06/25/2001	Hideo Yokota	8305-210US (NP102-1)	9376

570 7590 12/19/2001

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EXAMINER

MCAVOY, ELLEN M

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 12/19/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

09/891,486

Applicant(s)

YOKOTA ET AL. 

Examin r

Ellen M McAvoy

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al (5,171,903) or Zehler et al (4,601,840), in combination with Ott (6,085,782).

Koyama et al ["Koyama"] disclose a lubricating oil composition for plastic working, metal working, or for cutting and grinding which comprises (i) a linear olefin having 6 to 40 carbon atoms as a base oil, (ii) at least one member of compounds selected from the group consisting of alcohol, glycol, polyalkylene glycol, and a derivative of polyalkylene glycol and fatty acid, and (iii) at least one of phenolic compounds and amine compounds. See column 2, lines 3-54. Component (ii) includes fatty acid esters of polyethylene glycol which may be added to the composition in an amount of 0.05 to 50 weight % of the entire composition. See column 16, lines 25-51. The examiner is of the position that the ester component of Koyama meets the limitations of the ester component of the claims. The composition of the prior art also includes alkyl-substituted phenols as component (iii) in an amount of 0.1 to 2.0 weight % based on the entire composition. See column 16, line 52, to column 17, line 50. This meets the limitation of the oiliness component of the claims when it comprises (D), compounds represented by formula (1) set forth in dependent claim 10. The composition of Koyama can also be blended with a suitable quantity of well-known oiliness agents, extreme-pressure agents, rust inhibitors,

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corrosion inhibitors, and the like. See column 17, line 52 to column 18, line 2. Thus, the examiner is of the position that the composition of Koyama meets the limitations of the cutting and grinding oil composition of the claims. Ott is added to teach that "minimal quality lubrication" is a term known in the lubricant art for tool working. See column 1, lines 10-67. Ott teaches that oil compositions can be supplied to workpieces in an amount of 20 ml per hour. See column 2, top. The examiner is of the position that the cutting and grinding oil composition of Koyama can be applied to a workpiece in such a manner if so desired.

Zehler et al ["Zehler"] disclose an improved mist lubrication process which utilizes a composition comprised of synthetic esters and a mixture of isobutylene polymers having different molecular weights. The synthetic esters include polyol esters, trimellitate esters and polymeric fatty acid esters. The polyol esters are derived from an aliphatic polyol having from 2 to 8 hydroxyl groups and 3 to 12 carbon atoms and an aliphatic monocarboxylic acid having from 5 to 20 carbon atoms. See column 2, line 43 to column 3, line 28. Zehler teaches that mist lubrication processes are well known and that numerous mist lubrication systems as well as operating conditions have been described in the art. Specifically, mist generators consisting of a lubricant and a compressed gas such as air are used to form oil mists. See column 3, lines 45-66. The composition of Zehler may also include conventional mist oil additives such as antioxidants, antiwear/extreme pressure agents, rust and corrosion inhibitors, and the like. See column 8, line 61 to column 9, line 64. The examiner is of the position that the mist oil composition of Zehler meets the limitations of the cutting and grinding oil composition of the claims. And, as set forth above, Ott is added to teach that such oils may be used in "minimal quantity lubrication", that is,

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of supplying a constantly uniform oil mist in a steady and even manner to the working area of a tool to be worked. Thus, the examiner is of the position that the mist oil composition of Zehler can be applied to workpieces in such a "minimal quantity lubrication" process if so desired.

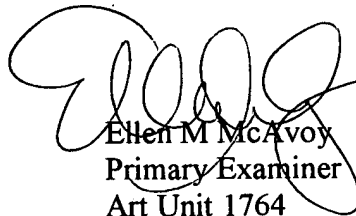
### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (703) 308-2510. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knode can be reached on (703) 308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Ellen M McAvoy  
Primary Examiner  
Art Unit 1764

EMcAvoy  
December 17, 2001